

WHAT IS CLAIMED IS:

1. An input-output circuit sending and/or receiving a signal to and/or from an electronic device, comprising:
 - a driver for supplying a signal to said electronic device;
 - a comparator parallel to said driver for receiving a signal from said electronic device;
 - a relaying circuit provided in series between said comparator and said electronic device;
 - a first transmission line for coupling said comparator and said relaying circuit electrically; and
 - a first switch for selecting either of short or open-circuited state of first transmission line and said electronic device,wherein impedance of said relaying circuit is larger than impedance of said first transmission line.
2. An input-output circuit as claimed in claim 1 further comprising a terminal circuit parallel to said comparator, wherein impedance of said terminal circuit is substantially equal to said impedance of said first transmission line.
3. An input-output circuit as claimed in claim 2, wherein said terminal circuit is provided between said first transmission line and a ground potential.
4. An input-output circuit as claimed in claim 3, wherein said impedance of said relaying circuit is smaller than an output rated load of said electronic device.
5. An input-output circuit as claimed in claim 4, wherein

said impedance of said relaying circuit is larger than internal output impedance of said electronic device.

6. An input-output circuit as claimed in claim 5, wherein said relaying circuit comprises a resistor of which impedance is larger than said impedance of said first transmission line.

7. An input-output circuit as claimed in claim 6 further comprising a second switch parallel to said first switch for selecting either of short or open-circuited state of said first transmission line and said electronic device,

wherein internal impedance of said second switch, when said second switch is short-circuited, is larger than said internal impedance of said first switch, when said first switch is short-circuited, and smaller than said impedance of said relaying circuit.

8. An input-output circuit as claimed in claim 7, wherein parasitic capacitance of said second switch is smaller than parasitic capacitance of said first switch.

9. An input-output circuit as claimed in any one of claims 3 to 6 further comprising a switch controller for controlling said first switch to be short-circuited in case said driver supplies a signal to said electronic device and to be open-circuited in case said comparator receives a signal from said electronic device.

10. An input-output circuit as claimed in claim 7 or 8 further comprising a switch controller,

wherein said switch controller controls said first switch

to be short-circuited and said second switch to be open-circuited in case said driver supplies a direct current signal to said electronic device,

said first switch to be open-circuited and said second switch to be short-circuited in case said driver supplies an alternating current signal to said electronic device, and

said first switch and said second switch to be open-circuited in case said comparator receives a signal from said electronic device.

11. An input-output circuit as claimed in claim 10 further comprising a second transmission line for coupling said first and second switches and said relaying circuit with said electronic device electrically,

wherein impedance of said transmission line is substantially equal to a sum of impedance of said first transmission line and said internal impedance of said second switch.

12. An input-output circuit as claimed in claim 11, wherein said internal impedance of said second switch is substantially zero (0).

13. A testing apparatus for testing an electronic device, comprising:

a pattern generating unit for generating a test pattern for testing said electronic device;

a waveform adjusting unit for adjusting said test pattern;

an input-output circuit for supplying said test pattern adjusted by said waveform adjusting unit to said electronic device and receiving an output signal outputted by said electronic device

based on said test pattern; and

a judging unit for judging quality of said electronic device based on said output signal,

wherein said input-output circuit comprises:

a driver for supplying said test pattern to said electronic device;

a comparator provided parallel to said driver for receiving an output signal from said electronic device;

a relaying circuit provided in series between said comparator and said electronic device;

a first transmission line for coupling said comparator and said relaying circuit electrically; and

a first switch for selecting either of short or open-circuited state of said first transmission line and said electronic device,

wherein impedance of said relaying circuit is larger than impedance of said first transmission line.